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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/602,279	06/23/2000	Mario Nemirovsky	P3814	9147

24739 7590 11/19/2002

CENTRAL COAST PATENT AGENCY
PO BOX 187
AROMAS, CA 95004

EXAMINER

PEYTON, TAMMARA R

ART UNIT	PAPER NUMBER
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2182

DATE MAILED: 11/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/602,279

Applicant(s)

NEMIROVSKY ET AL.

Examiner

Tammara R Peyton

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-24 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Rosenthal et al.*, (US 5,918,050).
2. As per claims 1, 7, 13, and 18, *Rosenthal* teaches a background memory manager (BMM) (MMU, 50, 52 + DMA, 35 within I/O Control Unit, 29, Fig.4) for managing a memory in a data processing system, the BMM comprising:
 - circuitry for transferring data to and from an outside device and to and from a memory;
 - a memory state map associated with the memory; and
 - a communication link to a processor (21, Fig.2).
3. *Rosenthal* teaches a system with a BMM that manages the memory. Therefore, it would had been obvious to one of ordinary skill in the art that *Rosenthal's* BMM would perform the inherent characterizes of a BMM. Particularly, the BMM would obviously

determine if each data structure fits into the memory, deciding exactly where to place the data structure in memory, performing all data transfers between the outside device and the memory, and maintaining the memory state map according to memory transactions made, and informing the processor of new data and its location. (Abstract, col. 6, lines 58-col.26)

4. As per claim 2, 8, 14, and 19, *Rosenthal* obviously teaches wherein the BMM stores each data structure, provides a data identifier for the structure on the link to the processor.

5. As per claim 3, 9, 15, and 20, *Rosenthal* obviously teaches wherein the BMM makes memory transactions, updates the memory state map to the new memory state, keeping track of regions occupied by valid data and regions not occupied by valid data.

6. As per claim 4, 10, 16, and 21, *Rosenthal* obviously teaches wherein the BMM responds to a signal on the processor link that the processor is finished with certain identified data in the memory, copies the data from the memory, if needed, to another device, and updates the memory state map to indicate the region of the data copied.

7. As per claim 5, 11, 17, and 22, *Rosenthal* obviously teaches of further comprising an interrupt handler allowing a remote data source to interrupt the BMM when data is available to be transferred to the memory.

8. As per claim 6, 12, 23, and 24, *Rosenthal* does not teach wherein the data handled by the BMM constitutes Internet network data packets, however, it would have been obvious to one of ordinary skill that a host of other types of data could be handled in *Rosenthal's* system. Doing so would have flexibility to *Rosenthal's* system.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammara Peyton whose telephone number is (703) 306-5508. The examiner can normally be reached between 8:00 - 4:30 from Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin, can be reached on (703) 308-3301. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3718.

Any inquiry of a general nature of relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Mailed responses to this action should be sent to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231.

Faxes for Official/formal communications intended for entry should be sent to:

Art Unit: 2182

(703) 746-7238, After Final (703) 746-7239

or, for informal or draft communications, to:

(703) 746-7240 (please label "PROPOSED" or "DRAFT").

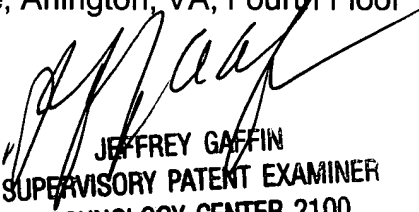
Hand-delivered responses should be brought to:

Crystal Park II, 2121 Crystal Drive, Arlington, VA, Fourth Floor

(Receptionist).

Tammara Peyton

November 15, 2002



JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100